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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

089229.00063

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on _____

Signature _____

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Name _____

Application Number:

10/521,406

Filed: January 18, 2005

First Named Inventor:

Jarno RAJAHALME

Art Unit: 2416

Examiner: Candal Elpenord

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the



Signature

- ☐ Applicant/Inventor.
- ☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under
37 CFR 3.73(b) is enclosed (Form PTO/SB/96)

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703-720-7822

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- ☐ Attorney or agent acting under 37 CFR 1.34.
Registration Number if acting under 37 CFR 1.34 _____

November 5, 2008

Date

NOTE: Signatures of all of the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

- ☒ *Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**NOTICE OF APPEAL FROM
THE PRIMARY EXAMINER TO THE BOARD OF APPEALS**

In re the Application of:

Jarno RAJAHALME

Application No.: 10/521,406

Filed: January 18, 2005



Confirmation No.: 7008

Art Unit: 2416

Examiner: Candal Elpenord

Attorney Dkt. No.: 089229.00063

For: ROUTE OPTIMIZING IN MOBILE IP PROVIDING LOCATION PRIVACY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

November 5, 2008

Sir:

Applicant hereby appeals to the Board of Appeals from the decision dated August 18, 2008 of the Primary Examiner finally rejecting Claims 1-21.

The item(s) checked below are appropriate:

1. ☐ A petition for an extension of time to respond to the final rejection was filed on _____ for _____ month(s).

2. ☐ A timely response to the final rejection has been filed, as provided in 841 O.G. 1411.

3. ☒ Fee \$540.00 or ☐ Small Entity \$270.00

☒ Check No. 19939 is enclosed.

☐ Charge to Counsel's Deposit Account No. 50-2222. An additional copy of this Notice is enclosed.

In the event that this paper is not considered to be timely filed, applicant hereby petition for an appropriate extension of time. The fee for this extension may be charged to Counsel's Deposit Account No. 50-2222, along with any other additional fees which may be required with respect to this paper.

SQUIRE, SANDERS & DEMPSEY LLP

Signature (Rule 191(b)) . . .

A handwritten signature in black ink, appearing to read "Kamran Emdadi".

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Jarno RAJAHALME

Application No.: 10/521,406

Filed: January 18, 2005



Confirmation No.: 7008

Art Unit: 2416

Examiner: Candal Elpenord

Attorney Dkt. No.: 089229.00063

For: ROUTE OPTIMIZING IN MOBILE IP PROVIDING LOCATION PRIVACY

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

November 5, 2008

Sir:

In accordance with the Pre-Appeal Brief Conference Pilot Program guidelines set forth in the July 12, 2005 Official Gazette Notice, Applicant hereby submits this Pre-Appeal Brief Request for Review of the final rejections of claims 1-21 in the above identified application. Claims 1-21 were finally rejected in the Office Action dated August 18, 2008. Applicant filed a Response to the Final Office Action on September 23, 2008, and the Office issued an Advisory Action dated October 20, 2008 maintaining the final rejections of claims 1-21. Applicant hereby appeals these rejections and submit this Pre-Appeal Brief Request for Review because the rejections contain clear errors.

Claims 1, 2, 11, and 12 were rejected under 35 U.S.C. §102(e) as being anticipated by Johansson (U.S. Patent Pub. No. 2002/0080752). This rejection contains clear errors and must be withdrawn.

Johansson discloses a route optimization technique requiring no awareness of the Mobile IP protocol by a Correspondent Node when forwarding traffic using the shortest path between a Mobile Node and the Correspondent Node in a visiting domain. Traffic between the mobile node 3 and the correspondent node CN 4a (i.e., the host situated on the home network 9) will be routed through the mobile IP tunnel 30a over the logical interface 32a by the foreign agent 2.

Johansson fails to disclose "establishing a route from the source via at least one first mobility agent associated to said source and at least two consecutively arranged second mobility agents associated to said destination," as recited in claims 1, 11 and 21. The Advisory Action took the position that router agent 1 and router agent 2a correspond to the "at least two consecutively arranged second mobility agents" recited in the claims (see Advisory Action, page 2, lines 6 and 7). Applicants submit that elements "1" and "2a" represent home agent 1 and foreign agent 2a, respectively, and will be referred to as such hereinafter (see paragraph [0067] of Johansson for a correct interpretation of elements 1 and 2a). The Office Action's reasoning contains clear errors because the home agent 1 and foreign agent 2a of Johansson are not consecutively arranged and are not both associated to a destination.

In the response to arguments section of the Office Action, it is asserted that Johansson discloses at least two consecutively arranged second mobility agents in figs. 3a to 3b and paragraphs [0074] and [0077]. With respect to figure 3a, Johansson merely disclose that traffic between the mobile node 3 and the correspondent node CN 4a are routed through the mobile IP tunnel 30a, and that the routing is

performed by the foreign agent 2 (Johansson, paragraph [0075]). Johansson does not disclose that the foreign agent 2 and home agent 1 are consecutively arranged, and, in fact, it is clear from figure 3a that they indeed are not consecutively arranged.

With respect to figure 3b, Johansson discloses that, “[w]hen the mobile node 3 deregisters at the visited network 8a, the foreign agent 2a removes its mobile node 3 route 3’. However, when the mobile node registers at the visited network 8b, the foreign agent 2b will start to advertise the mobile node 3 route 3’ with a lower cost than the home agent 1 on the interface 32e” (Johansson, paragraph [0077]). Thus, Johansson only discloses a foreign agent 2a and 2b in each of the respective visited networks 8a and 8b. To say that the home agent 1 and the foreign agents 2a and 2b are consecutive is comparable to saying that two communications devices can be consecutive when both are communicating on opposite sides of the Internet 6. Furthermore, the names of the networks themselves (e.g., home and foreign) clearly indicate that the network devices home agent 1 and foreign agents 2a and 2b etc. are not consecutive and are located on separate networks.

Johansson fails to disclose consecutively arranged second mobility agents. Accordingly, Johansson does not disclose or suggest “at least two consecutively arranged second mobility agents associated to said destination,” as recited in the present claims.

Furthermore, Johansson fails to disclose or suggest “rerouting said route from one of said at least one first mobility agents directly to one of the at least two consecutively arranged second mobility agents such that at least one intermediate mobility agent in said route is bypassed in the resulting rerouted route,” as recited in claim 1 and similarly recited in claims 11 and 21. Rather, Johansson only discloses that traffic sent from mobile node 3 to correspondent nodes 4b and 4c or traffic sent from correspondent nodes 4b and 4c to mobile node 3 does not need to be routed through the home agent because the correspondent nodes 4b and 4c are located at the local site, i.e. on the same visited network (Johansson, paragraph [0075]). Johansson does not disclose any type of rerouting in this regard. In addition, no intermediate mobility agent is provided in the route between the mobile node 3 and correspondent nodes 4b and 4c (see Johansson, Fig. 3A). Therefore, Johansson cannot disclose “rerouting said route...such that at least one intermediate mobility agent in said route is bypassed in the resulting rerouted route.”

In the response to arguments section, the Office Action cited paragraphs [0020], [0066], and [0068] of Johansson as allegedly teaching the claimed “rerouting.” However, these sections of Johansson merely discuss route optimization in general and do not mention any specifics regarding at least one intermediate mobility agent in the route that is bypassed in the resulting rerouted route. In fact, Johansson teaches that, when traffic is being sent from the mobile node 3 to the home network, the traffic is routed through the home agent (Johansson, paragraph [0074]). Johansson does not disclose any rerouting of this traffic. Thus, Applicants respectfully submit that Johansson fails to disclose or suggest “rerouting said route from one of said at least one first mobility agents directly to one of the at least two consecutively arranged second mobility agents such that at least one intermediate mobility agent in said route is bypassed in the resulting rerouted route,” as recited in claim 1 and similarly recited in claim 11. Therefore, the rejections of claims 1 and 11 contain clear errors and must be withdrawn.

Claims 2 and 12 are dependent upon claims 1 and 11, respectively. As such, claims 2 and 12 should be allowed for at least their dependence upon claims 1 and 11, and for the specific limitations recited therein.

Claim 21 was rejected under 35 U.S.C. §103(a) as being unpatentable over Lee (U.S. Patent No. 6,915,325). This rejection contains clear errors and must be withdrawn.

Lee discloses a method and program code for communicating with a mobile node through tunnels. Location update messages for a mobile node are made vulnerable to interception by routers which form tunnels for communication with the mobile node. A correspondent agent intercepts a Binding Update with a Router Alert and binds the address of the mobile node with a care of address for the mobile node provided in the Binding Update.

Lee fails to disclose or suggest all of the limitations of claim 21. For example, Lee does not disclose or suggest "at least two consecutively arranged second mobility agents associated to said destination," and "rerouting means for performing, in response to said decision, a rerouting of said route from one of said at least one first mobility agents directly to one of the at least two consecutively arranged second mobility agents such that at least one intermediate mobility agent in said route is bypassed in the resulting rerouted route," as recited in claim 21.

Rather, Lee teaches that "[b]y programming a correspondent agent 60 to recognize a Binding Update when a Router Alert is included, the correspondent agent 60 will intercept the Binding Update with Router Alert and take steps to form a tunnel to the mobile node. To form a tunnel, the correspondent agent binds the mobile node address with the care of address received in the location update message. With the tunnel in place, messages from the correspondent host 50 meant for the mobile node 10 are identified by the correspondent agent 60 and redirected by the correspondent agent 60 to the care of address. Thus, the message travels through the tunnel rather than the home agent 30" (Lee, Column 4, lines 4-18). Thus, Lee discloses that messages from the correspondent host intended for the mobile node are redirected to the care of address of the mobile node, and do not travel through the home agent.

In contrast, claim 21 recites that the route from one of the first mobility agents is rerouted directly to one of the consecutively arranged second mobility agents such that the intermediate mobility agent is bypassed. Lee fails to disclose such a configuration. Indeed, Lee does not even disclose or suggest at least two consecutively arranged second mobility agents associated to said destination.

Therefore, Lee fails to disclose or suggest "at least two consecutively arranged second mobility agents associated to said destination," and "rerouting means for performing, in response to said decision, a rerouting of said route from one of said at least one first mobility agents directly to one of the at least two consecutively arranged second mobility agents such that at least one intermediate mobility agent in said route is bypassed in the resulting rerouted route," as recited in claim 21.

Claims 1, 2, 11, and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Leung (U.S. Patent No. 6,195,705) in view of Ramjee (U.S. Patent No. 6,842,462). The Office Action took the position that Leung discloses all of the elements of the claims, with the exception of at least one intermediate mobility agent in the route being bypassed in the resulting rerouted route. The Office Action then cited Ramjee as allegedly curing this deficiency in Leung. This rejection contains clear errors and must be withdrawn.

Leung discloses a method and apparatus for automatically backing up a Home Agent in Mobile IP. The method includes determining that an active Mobility Agent, with which the standby Mobility Agent shares a virtual IP address known to a Mobile Node, is no longer acting as a Mobility Agent for the Mobile Node.

Ramjee discloses a General Packet Radio Service (GPRS) Accessed Extended Mobile Internet Protocol (EMIP) [G-EMIP] network. Domains are defined to incorporate a subnet of standard GPRS and EMIP network entities accessed through a Domain Router. Packet access at the radio interface is provided using the base station portion of a GPRS network.

Applicants respectfully submit that the combination of Leung and Ramjee fails to disclose or suggest all of the elements of the present claims. For example, the combination of Leung and Ramjee does not disclose or suggest "at least two consecutively arranged second mobility agents associated to said destination," as recited in claims 1 and 11. The Office Action took the position that Leung discloses this limitation of the claims. In particular, the Office Action cited the foreign agent 10 of Leung as allegedly corresponding to the "at least two consecutively arranged second mobility agents" (see Office Action, page 10). Applicants submit that this is obviously an incorrect reading of the claims. The foreign agent 10 of Lueng is clearly a single agent. Leung does not disclose at least two foreign agents and, as a result, does not disclose any consecutively arranged mobility agents associated to the destination. Ramjee does not cure this deficiency in Leung. Therefore, the combination of Leung and Ramjee fails to disclose or suggest "at least two consecutively arranged second mobility agents associated to said destination," as recited in claims 1 and 11.

Furthermore, the combination of Leung and Ramjee does not disclose or suggest "rerouting said route from one of said at least one first mobility agents directly to one of the at least two consecutively arranged second mobility agents such that at least one intermediate mobility agent in said route is bypassed in the resulting rerouted route," as recited in claim 1 and similarly recited in claim 11. Since, as discussed above, Leung and Ramjee do not disclose at least two consecutively arranged second mobility agents, it follows that the combination of Leung and Ramjee cannot disclose or suggest rerouting the route directly to one of the at least two consecutively arranged second mobility agents. In the response to arguments section, the Office Action stated that Ramjee discloses bypassing the mobile device's home network, which "is treated as rerouting the route by the examiner" (Office Action, page 3). Applicants respectfully submit, however, that the claims do not simply recite rerouting the route. Rather, as outlined above, claims 1 and 11 recite a specific manner of rerouting, and, in particular, "rerouting said route from one of said at least one first mobility agents directly to one of the at least two consecutively arranged second mobility agents such that at least one intermediate mobility agent in said route is bypassed in the resulting rerouted route." Leung and Ramjee, whether considered individually or combined, do not disclose or suggest such a rerouting.

Accordingly, the combination of Leung and Ramjee also does not disclose or suggest this element of the claims. Thus, the combination of Leung and Ramjee do not render claims 1, 11, and 21 as obvious. Therefore the rejection of claims 1 and 11 contain clear errors and must be withdrawn.

Claims 2 and 12 are dependent upon claims 1 and 11, respectively. As such, claims 2 and 12 should be allowed for at least their dependence upon claims 1 and 11, and for the specific limitations recited therein.

Claims 3-8 and 13-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Johansson in view of Forslow (U.S. Patent No. 6,973,057). This rejection contains clear errors and must be withdrawn.

Johansson is discussed above. Forslow discloses a public mobile access data network which provides a mobile node data access to the Internet and data access to the mobile node from the Internet even when a point of attachment of the mobile node to the public mobile access data network changes.

Claims 3-8 and 13-18 are dependent upon claims 1 and 11, respectively, and inherit all of the limitations thereof. Additionally, as discussed above, Johansson fails to disclose or suggest all of the elements of claims 1 and 11. Forslow does not cure the deficiencies in Johansson as Forslow also fails to disclose or suggest "at least two consecutively arranged second mobility agents associated to said destination," and "rerouting said route from one of said at least one first mobility agents directly to one of the at least two consecutively arranged second mobility agents such that at least one intermediate mobility agent in said route is bypassed in the resulting rerouted route," as recited in claim 1 and

similarly recited in claim 11. As such, the combination of Johansson and Forslow fails to disclose or suggest all of the elements of claims 3-8 and 13-18.

Claims 3, 4, 6, 8-10, 13, 14, 16, and 18-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Johansson in view of Karagiannis (U.S. Patent Pub. No. 2002/0015395). This rejection contains clear errors and must be withdrawn.

Johansson is discussed above. Karagiannis discloses a method and system for inter-operability between mobile IP and RSVP during route optimization. A correspondent host that needs to begin a real-time packet-data session with a mobile node sends a mobile IP binding request message to a home agent of the mobile node.

Claims 3, 4, 6, 8-10, 13, 14, 16, and 18-20 are dependent upon claims 1 and 11, respectively, and inherit all of the limitations thereof. Additionally, as discussed above, Johansson fails to disclose or suggest all of the elements of claims 1 and 11. Karagiannis does not cure the deficiencies in Johansson as Karagiannis also fails to disclose or suggest "at least two consecutively arranged second mobility agents associated to said destination," and "rerouting said route from one of said at least one first mobility agents directly to one of the at least two consecutively arranged second mobility agents such that at least one intermediate mobility agent in said route is bypassed in the resulting rerouted route," as recited in claim 1 and similarly recited in claim 11. As such, the combination of Johansson and Karagiannis fails to disclose or suggest all of the elements of claims 3, 4, 6, 8-10, 13, 14, 16, and 18-20.

For at least the reasons discussed above, Applicants respectfully submit that the cited prior art fails to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-21 be allowed, and this application passed to issue.

Reconsideration and withdrawal of the rejections, in view of the clear errors in the Office Action, is respectfully requested. In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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